**Project Name:** Wellhead Protection

**Project Cost:** \$600,000 (or \$100,000 annually)

**Project Location:** Various

**Project Description:** Wellhead protection as it relates to the development, implementation and

administration of the citywide groundwater-related protection programs

and projects.

**Project Schedule:** Annual program

**Project Justification:** Numerous small projects will be identified through initial program

implementation including the need for new monitoring wells, water quality protection projects, and other adjustments to City facilities to

reduce the contamination potential to the City wells.

**Description of M&O Cost:** M&O covered in operating program. Capital improvements will increase

M&O negligibly.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Total Project Revenues:  W/WW CIP	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 0						\$0 0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** Reservoir Park Pump Station

**Project Cost:** \$2,000,000

**Project Location:** Reservoir Park Water Tank

**Project Description:** The existing pump station and flow control facilities contain 20-year-old

mechanical and electrical equipment in 5 underground vaults. This project replaces the mechanical and electrical equipment within a new

building.

**Project Schedule:** Design during 2006 with construction in 2007.

**Project Justification:** Replace aging mechanical and electrical systems.

**Description of M&O Cost:** No increased staff costs, as this is a replacement facility. Minimal

operating cost increases are projected at \$1,000 annually.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$0	\$500,000	\$1,500,000				\$2,000,000
Total Project Revenues:  W/WW CIP	\$0	\$500,000	\$1,500,000				\$2,000,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 1,000	1,000	1,000	1,000	1,000	1,000	\$0 6,000
Total Ongoing M&O	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$6,000

**Project Name:** Water System Security Improvements

**Project Cost:** \$400,000

**Project Location:** Water reservoirs and pump stations.

**Project Description:** Security improvements at water facilities as recommended by the

Vulnerability Assessment.

**Project Schedule:** Added to facilities during 2005 and 2006.

**Project Justification:** Lessen vulnerability of water system.

**Description of M&O Cost:** The cost of maintenance and monitoring of the security system ranges

from \$36,000 to \$86,000 each year.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$200,000	\$200,000					\$400,000
Total Project Revenues: W/WW CIP	\$200,000	\$200,000					\$400,000
Ongoing M&O Costs:	-						
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 36,000	81,000	37,080	83,430	38,192	85,933	\$0 361,635
Total Ongoing M&O	\$36,000	\$81,000	\$37,080	\$83,430	\$38,192	\$85,933	\$361,635

**Project Name:** Kirkland Joint Use Water System Security Improvements

**Project Cost:** \$300,000

**Project Location:** Water reservoirs and pump stations.

**Project Description:** Security improvements at water facilities as recommended by

Vulnerability Assessment.

**Project Schedule:** Add to facilities during 2005 and 2006.

**Project Justification:** Lessen vulnerability of water system.

**Description of M&O Cost:** Maintenance and operating costs of \$10,000 annually are paid directly by

Kirkland and billed as intergovernmental charge.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$150,000	\$150,000					\$300,000
Total Project Revenues:	_						
W/WW CIP	\$150,000	\$150,000					\$300,000
Ongoing M&O Costs:	_						
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	5,000	10,000	10,000	10,000	10,000	10,000	55,000
Total Ongoing M&O	\$5,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$55,000

**Project Name:** Well 4 Improvements

**Project Cost:** \$100,000

**Project Location:** City Campus

**Project Description:** Add a sand separator to remove sand being pumped from the well as well

as other minor improvements.

**Project Schedule:** 2005

**Project Justification:** The well is pumping sand which is severely impacting the chemical

treatment equipment and building water systems.

**Description of M&O Cost:** The sand separator will increase manpower requirements and utility costs

at the facility. The manpower will be accomplished by existing FTEs.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$100,000						\$100,000
Total Project Revenues:	_						
W/WW CIP	\$100,000						\$100,000
Ongoing M&O Costs:	_						
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** NE 83<sup>rd</sup> Street Water Improvements (Increase)

**Project Cost:** \$80,000 (total project cost \$100,000)

**Project Location:** NE 83<sup>rd</sup> Street

**Project Description:** Relocate existing water mains, fire hydrants, and meters serving

properties adjacent to the NE 83<sup>rd</sup> Street Improvement Project.

**Project Schedule:** Timed coincident with the NE 83<sup>rd</sup> Street project.

**Project Justification:** Facilities need to be moved to accommodate the new roadway

improvements and to improve maintenance access to existing facilities.

**Description of M&O Cost:** No increase in costs, relocation of existing facilities.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$80,000						\$80,000
Total Project Revenues:	-						
W/WW CIP - Increase	\$80,000						\$80,000
Ongoing M&O Costs:	-						
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** Rose Hill Telemetry System Upgrades (Increase)

**Project Cost:** \$20,000 (total project cost \$35,000)

**Project Location:** Various jointly owned water tank, pump station and meter sites.

**Project Description:** Replace and upgrade the telemetry system for the jointly owned facilities

with Kirkland.

**Project Schedule:** Managed and coordinated by Kirkland.

**Project Justification:** Existing telemetry system has become outdated.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost				\$20,000			\$20,000
Total Project Revenues:							
W/WW CIP - Increase				\$20,000			\$20,000
0							
Ongoing M&O Costs:							
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$(	\$0	\$0	\$0	\$0

**Project Name:** NE 87<sup>th</sup> Street Water Main Replacement (Increase)

**Project Cost:** \$107,000 (total project cost \$317,000)

**Project Location:** NE 87<sup>th</sup> Street between 148<sup>th</sup> Avenue and Willows Road

**Project Description:** Replace existing 6-inch water main with 12-inch, and coordinate with

stream improvement project.

**Project Schedule:** Coordinated with permitting issues of stream culvert project.

**Project Justification:** Replace undersized asbestos cement water main in industrial area.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$107,000						\$107,000
Total Project Revenues:	<del>_</del>						
W/WW CIP - Increase	\$107,000						\$107,000
Ongoing M&O Costs:	_						
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 0						\$0 0
Total Ongoing M&O	\$0	\$(	\$0	\$0	\$0	\$0	\$0

**Project Name:** Water System Replacement Program (Increase)

**Project Cost:** \$200,000 (total project cost \$2.2 million)

**Project Location:** Various locations. To be established for each biennium based on

maintenance priorities and coordination with other City projects.

**Project Description:** Replace water system facilities.

**Project Schedule:** The replacement of water system facilities is an ongoing program. \$1.1

million is being programmed for each biennium for this project.

**Project Justification:** Continued program for the replacement of aging or undersized water

facilities or facilities that need to be relocated as part of road

improvement projects.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost			\$100,000		\$100,000		\$200,000
Total Project Revenues:	<u>-</u>						
W/WW CIP - Increase			\$100,000		\$100,000		\$200,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Number of FIEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$0	\$	0 \$0	\$0	\$0

Project Name: Harper Hill Apartment Meters (Increase)

**Project Cost:** \$15,000 (total project cost \$90,000)

**Project Location:** Harper Hill Apartments

**Project Description:** Provide individual building meters to an apartment complex that is

served by a single large meter.

**Project Schedule:** Planned for 2008, delayed from prior CIP.

**Project Justification:** Allows more accurate billing of water consumption and leak detection.

**Description of M&O Cost:** No significant change in maintenance and operation costs.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost			\$15,000				\$15,000
Total Project Revenues:							
W/WW CIP - Increase			\$15,000				\$15,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 0						\$0 0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project Name: Sunpointe Village Apartment Meters (Increase)

**Project Cost:** \$15,000 (total project cost \$90,000)

**Project Location:** Sunpointe Village Apartments

**Project Description:** Provide individual building meters to an apartment complex that is

served by a single large meter.

**Project Schedule:** Planned for 2008, delayed from prior CIP.

**Project Justification:** Allows more accurate billing of water consumption and leak detection.

**Description of M&O Cost:** No significant change in maintenance and operation costs.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost			\$15,000				\$15,000
Total Project Revenues:							
W/WW CIP - Increase			\$15,000				\$15,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 0						\$0 0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** Archstone Apartment Meters (Increase)

**Project Cost:** \$15,000 (total project cost \$90,000)

**Project Location:** Archstone Apartments

**Project Description:** Provide individual building meters to an apartment complex that is

served by a single large meter.

**Project Schedule:** Planned for 2008, delayed from prior CIP.

**Project Justification:** Allows more accurate billing of water consumption and leak detection.

**Description of M&O Cost:** No significant change in maintenance and operation costs.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost			\$15,000				\$15,000
Total Project Revenues:							
W/WW CIP - Increase			\$15,000				\$15,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 0						\$0 0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** General Sewer System Plan Update

Project Cost: \$300,000

Project Location: Citywide

**Project Description:** Sewer Facility Plan. Current Sewer Plan Update costs increased,

requiring an additional \$50,000 in 2005. New 6-year update cycle begins

in 2009 at an anticipated cost of \$250,000.

**Project Schedule:** Review and update plan on a 6-year cycle.

**Project Justification:** Good practice and required by state and local regulations.

**Description of M&O Cost:** Utility engineering staff hours are allocated to managing these studies,

and maintaining the mapping and hydraulic analysis programs that

support the Plan.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$50,000				\$100,000	\$150,000	\$300,000
Total Project Revenues:							
W/WW CIP	\$50,000				\$100,000	\$150,000	\$300,000
Ongoing M&O Costs:							
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** 116<sup>th</sup> Sewer Replacement (York Bridge) (Increase)

**Project Cost:** \$75,000 (total project cost \$375,000)

**Project Location:** 116<sup>th</sup> and the Sammamish River

**Project Description:** Replace an existing sewer that is in the way of the new bridge abutment

and retaining walls.

**Project Schedule:** Timed coincident with the York Bridge Project.

**Project Justification:** Sewer needs to be moved away from the Bridge walls.

**Description of M&O Cost:** Access to sewer will be more difficult because of the bridge structure but

there is no additional staff or cost required to maintain this relocated

sewer.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost	\$75,000						\$75,000
Total Project Revenues:							
W/WW CIP - Increase	\$75,000						\$75,000
Ongoing M&O Costs:	•						
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** Sewer Rehabilitation Phase 2 (Increase)

**Project Cost:** \$60,000 (total project cost \$350,000)

**Project Location:** Various

**Project Description:** Rehabilitate existing sewers.

**Project Schedule:** Planned for 2006.

**Project Justification:** Repair or replace defects in the sewer system discovered during

television inspections.

**Description of M&O Cost:** No increase in costs; repair of existing facilities.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost		\$60,000					\$60,000
Total Project Revenues:							
W/WW CIP - Increase		\$60,000					\$60,000
Ongoing M&O Costs:							
Staffing: Number of FTEs	0.00						0.00
Salary/Benefit Costs Operating Costs	\$0 0						\$0 0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Project Name:** Generator Replacement Project (Increase)

**Project Cost:** \$120,000 (total project cost \$300,000)

**Project Location:** Various sewer pump stations.

**Project Description:** Planned replacement of generators at sewer pump stations that were

installed in the mid-1980s.

**Project Schedule:** Project has been delayed from previous CIP. Will continue to monitor

equipment functionality to determine appropriate time to replace the

generators.

**Project Justification:** Mechanical equipment like generators wear out and become more

expensive to repair than to replace.

	2005	2006	2007	2008	2009	2010	Total 2005-2010
Total Project Cost						\$120,000	\$120,000
Total Project Revenues:							
W/WW CIP - Increase						\$120,000	\$120,000
Ongoing M&O Costs:							
Staffing:							
Number of FTEs	0.00						0.00
Salary/Benefit Costs	\$0						\$0
Operating Costs	0						0
Total Ongoing M&O	\$0	\$0	\$0	\$0	\$(	\$0	\$0